

SEQUENCE LISTING

<110> LEE, Sang-Yup
JEONG, Ki-Jun

<120> ESCHERICHIA COLI STRAIN SECRETING HUMAN
GRANULOCYTE COLONY STIMULATING FACTOR (G-CSF)

<130> HYLEE60.001APC

<140> US 10/009,792

<141> 2001-11-13

<150> PCT/KR01/00549

<151> 2001-03-31

<150> KR 10-2000-0017052

<151> 2000-03-31

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Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln
      20          25          30
Glu Lys Leu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu Glu Leu Val
      35          40          45
Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu Ser Ser Cys
      50          55          60
Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln Leu His Ser
      65          70          75          80
Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu Gly Ile Ser
      85          90          95
Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp Val Ala Asp
      100          105          110
Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly Met Ala Pro
      115          120          125
Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala Ser Ala Phe
      130          135          140
Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu Gln Ser Phe
      145          150          155          160
Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln Pro
      165          170

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<210> 20
 <211> 531
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<210> 21

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 Gln Glu Lys Leu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu Glu Leu
 35 40 45
 Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu Ser Ser
 50 55 60
 Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln Leu His
 65 70 75 80
 Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu Gly Ile
 85 90 95
 Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp Val Ala
 100 105 110
 Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly Met Ala
 115 120 125
 Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala Ser Ala
 130 135 140
 Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu Gln Ser
 145 150 155 160
 Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln Pro
 165 170 175

<210> 22
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 <212> DNA
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<400> 22
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<210> 23
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 23
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<210> 24
 <211> 135
 <212> DNA
 <213> Homo sapiens

<400> 24
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<210> 25
 <211> 45
 <212> PRT
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<400> 25
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 Met Ser Ile Ser Met Phe Ser Ala Thr Ala Ser Ala Thr Pro Leu Gly
 20 25 30
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 35 40 45

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 <212> DNA
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 <212> PRT
 <213> Homo sapiens

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 His His His His His Ile Glu Gly Arg Thr Pro Leu Gly Pro Ala Ser
 35 40 45
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<400> 28
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<400> 29

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<213> synthetic sequence

<400> 30

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